

REMARKS

Reconsideration of this Application is respectfully requested. In response to the Office Action mailed August 23, 2005 and the Advisory Action dated December 6, 2005, Applicant submits the following. Claims 1-55 are pending.

Based on the following Remarks, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections.

Telephonic Interview

Applicant thanks Examiner Lemma and Examiner Barron for the courtesies extended during the telephonic interview of January 12, 2006. During the interview, claim 42 was discussed. Applicant argued that U.S. Patent Application Publication No. 2002/0101989 to Markandey (hereinafter Markandey) applied in the Office Action (hereinafter Action) to finally reject claim 42 did not teach encrypting of non-packetized data. Agreement was reached that Markandey teaches scrambling and encryption of packetized DVD data, but does not teach scrambling and encryption of **non**-packetized data. Examiners requested that this Second Request for Reconsideration be filed presenting further arguments describing this distinction.

Rejections under 35 U.S.C. § 103

On pages 15-22, the Action rejects claims 2, 3, 10, 12, 13, 15, 16, 18, 24, 26, 28-35, 37-45, 47-51, and 53-55 under 35 U.S.C. § 103(a) as being obvious over Markandey in view of U.S. Patent No. 6,542,992 to Peirce, Jr. et al. (hereinafter Peirce). Applicant respectfully disagrees.

Applicant respectfully traverses the rejection as the Action fails to establish a *prima facie* case of obviousness. In order to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. M.P.E.P. § 2143.

(a) On pages 15-16, the Action rejects claim 42. Claim 42 recites: "A method for transmitting secure data comprising: **encrypting non-packetized data at a data link layer;**

packetizing the data; encrypting the packetized data at an Internet Protocol layer; and transmitting the packetized, encrypted data over a network.” (Emphasis added.)

Features of claim 42 are described in, for example, page 7, lines 1-16, page 9, line 28 – page 12, line 12, line 10, and, for example, FIGs. 2, 3, 6, and 7. These sections describe a first computer system 10 that may generate unencrypted, continuous data (see FIG. 2, page 9, lines 28-30, FIG. 7, 120), encrypt the unencrypted, continuous data (see FIG. 7, 122), and transmit encrypted, continuous data via a modem to a first interface device 16 (see FIG. 2). The first interface device 16 may packetize the data, encrypt the packetized data at an Internet Protocol layer, and transmit the packetized, encrypted data over a network 22 (see FIG. 2).

FIG. 7 illustrates exemplary encryption and packetization performed on unencrypted, continuous data. 120 depicts an exemplary embodiment of unencrypted, continuous data. The unencrypted, continuous data may be encrypted in 122 to generate encrypted, continuous data. In 124, the encrypted, continuous data may be packetized. In 126, the encrypted, packetized data may be appended and prepended with a trailer and header, respectively, consistent with TCP/IP (see page 12, lines 2-3). In 128, the data may be encrypted once again, which may be at the IP layer (see page 12, lines 4-5, also see page 9, lines 30-31).

For at least the following reasons, the Action does not establish a *prima facie* case of obviousness to reject claim 42.

Neither Markandey nor Peirce teach or suggest encrypting non-packetized data at a data link layer. Specifically, neither disclose “encrypting the non-packetized data at a data link layer,” (emphasis added) as recited in claim 42. On page 15, the Action equates scrambling in the Markandey reference with encryption to anticipate the claimed encryption. However, Markandey only discloses scrambling of packetized DVD data, but does not teach scrambling of non-packetized data. Markandey teaches DVD data being placed in a program stream packet having 2,048 byte pack subelements (see Markandey, FIG. 4, paragraph [0047]). Markandey teaches that the 2,048 byte packs are scrambled and then stored on a DVD (see Markandey, paragraph [0071]). Thus, Markandey teaches scrambling of packetized DVD data, but does not teach scrambling of non-packetized data.

The Action also relies on Peirce for a teaching of encryption of non-packetized data at a data link layer. However, Peirce does not disclose encrypting non-packetized data at a data

link layer. Peirce teaches encryption and compression of data at a Point-to-Point protocol (PPP) layer (see Peirce, col. 4, lines 46-52). The only reference to the data link layer in Peirce is in column 5, lines 27-30 in reference to PPP. However, as is known in the art, PPP is a **packetizing protocol**. Thus, Peirce teaches encryption of packetized data at the data link layer, but does not teach encryption of **non-packetized data** at the data link layer.

Hence, Markandey and Peirce only describe scrambling and encryption of packetized data, respectively. Therefore, neither Markandey nor Peirce disclose “encrypting the **non-packetized data** at a data link layer,” (emphasis added) as recited in claim 42. Accordingly, the Action has not established a *prima facie* case of obviousness to reject claim 42 since the cited references do not teach all of the claim features. Claim 42 is in condition for allowance and allowance thereof is respectfully requested.

Claim 43, which depends from claim 42, is also in condition for allowance because of its dependence on an allowable claim.

(b) On pages 15-16, the Action rejects claim 44. Claim 44 recites: “A method for transmitting secure data comprising: encrypting the data at an Internet Protocol layer; further **encrypting the encrypted data at a data link layer**; and transmitting the data over a communication link.”

For at least the following reasons, the Action does not establish a *prima facie* case of obviousness to reject claim 44 based on the teachings of Markandey and Peirce.

The combination of Markandey with Peirce does not teach or suggest “further encrypting the encrypted data at a data link layer,” as recited in claim 44. This process is described on, for example, page 13, lines 15-29 of the instant application. In this embodiment, the data processed at the link layer is a bit stream, and is not packetized. Thus, the claimed step of “further encrypting the encrypted data at a data link layer” is on non-packetized data. For reasons discussed above in the remarks on claim 42, the combination of Markandey with Peirce only respectively disclose scrambling and encryption of packetized data, but do not teach or suggest encryption on a bit stream at the data link layer. Therefore, the Action does not establish a *prima facie* case of obviousness to reject claim 44 based on the teachings of Markandey and Peirce.

Accordingly, claim 44 is in condition for allowance and allowance thereof is respectfully requested.

Claims 45 and 47-49, which depend directly and indirectly from claim 44, are also in condition for allowance because of their dependence on an allowable claim.

(c) On page 17, the Action rejects claim 50. Claim 50 is allowable for reasons analogous to those given in support of claim 44. Accordingly, claim 50 is in condition for allowance and allowance thereof is respectfully requested.

Claims 51 and 53-55, which depend directly and indirectly from allowable claim 50, are also in condition for allowance because of their dependence on an allowable claim.

(d) On pages 18, and 20-21, the Action rejects claims 2, 3, 10, 12, and 13.

As discussed below, claim 1 is in condition for allowance.

Claims 2, 3, 10, 12, and 13 depend from allowable claim 1, and are therefore also in condition for allowance because of their dependence on an allowable claim.

(e) On pages 19-21, the Action rejects claims 15, 16, 18, 24, and 26.

As discussed below, claim 14 is in condition for allowance.

Claims 15, 16, 18, 24, and 26, which depend from allowable claim 14, are also in condition for allowance because of their dependence on an allowable claim.

(f) On pages 18-20, the Action rejects claims 28-35.

As discussed below, claim 27 is in condition for allowance.

Claims 28-35, which depend directly and indirectly from allowable claim 27, are also in condition for allowance because of their dependence on an allowable claim.

(g) On pages 18-21, the Action rejects claims 37-41.

As discussed below, claim 36 is in condition for allowance.

Claims 37-41, which depend from claim 36, are also in condition for allowance because of their dependence on an allowable claim.

II. On pages 22-24, the Action rejects claims 5-8 and 20-23 under 35 U.S.C. § 103(a) as being obvious over Markandey in view of European Patent No. 0 406 187 A1 to Blom (hereinafter Blom). Applicant respectfully disagrees.

(a) On pages 22-23, the Action rejects claims 5-8.

As discussed below, claim 1 is in condition for allowance. Claims 5-8, which depend directly and indirectly from allowable claim 1, are also in condition for allowance because of their dependence on an allowable claim.

(b) On pages 23-24, the Action rejects claims 20-23.

As discussed below, claim 14 is in condition for allowance. Claims 20-23, which depend directly and indirectly from allowable claim 14, are also in condition for allowance because of their dependence on an allowable claim.

III. On pages 24-25, the Action rejects claims 9 and 25 under 35 U.S.C. § 103(a) as being obvious over Markandey in view of U.S. Patent No. 6,697,872 to Moberg (hereinafter Moberg). Applicant respectfully disagrees.

(a) On page 25, the Action rejects claim 9. As discussed below, claim 1 is in condition for allowance. Claim 9, which depends directly from allowable claim 1, is also in condition for allowance because of its dependence on an allowable claim.

(b) The Action does not apply a rejection to claim 25 and is presumed to be in condition for allowance. As discussed below, claim 14 is in condition for allowance. Claim 25, which depends directly from allowable claim 14, is also in condition for allowance because of its dependence on an allowable claim.

IV. On pages 25-26, the Action rejects claims 46 and 52 under 35 U.S.C. § 103(a) as being obvious over Markandey in view of Peirce and further in view of Moberg. Applicant respectfully disagrees.

(a) As discussed above, claim 44 is in condition for allowance. Claim 46, which depends directly from allowable claim 44, is also in condition for allowance because of its dependence on an allowable claim.

(b) As discussed above, claim 50 is in condition for allowance. Claim 52, which depends directly from allowable claim 50, is also in condition for allowance because of its dependence on an allowable claim.

Rejections under 35 U.S.C. § 102

I. On pages 10-15, the Action rejects claims 1, 4, 11, 14, 17, 19, 27, and 36 under 35 U.S.C. § 102(e) as being anticipated by Markandey. Applicant respectfully disagrees.

(a) On page 11, the Action rejects claim 1. Claim 1 recites: “A method for securely transmitting data comprising: obtaining **non-packetized data** on a computer system for transmission; **encrypting the data** a first time such that the data is once encrypted; packetizing the once encrypted data; encrypting the packetized, once encrypted data a second time such that the data is twice encrypted; and transmitting the packetized, twice encrypted data.” (Emphasis added.)

For at least the following reasons, Markandey does not anticipate claim 1.

Markandey does not teach or suggest obtaining and encrypting non-packetized data. Specifically, Markandey does not teach or suggest “obtaining **non-packetized data** on a computer system for transmission; **encrypting the data** a first time such that the data is once encrypted” as recited in claim 1. On page 11, the Action alleges that the DVD in FIG. 7 of Markandey anticipates the claimed obtaining of non-packetized data, and that the reference to “SCRAMBLED DATA” in FIG. 7 of Markandey anticipates the claimed encrypting of the data. Applicant respectfully disagrees.

Markandey only teaches scrambling of packetized data, and not scrambling of non-packetized data. Markandey teaches DVD data being placed in a program stream packet having 2,048 byte pack subelements (see Markandey, FIG. 4, paragraph [0047]). Markandey teaches that the 2,048 byte packs are scrambled and then stored on a DVD (see Markandey, paragraph [0071]). Thus, the scrambling of Markandey occurs on packetized data, and hence Markandey does not teach scrambling of non-packetized data. Therefore, Markandey does not teach or suggest “obtaining **non-packetized data** on a computer system for transmission; **encrypting the data** a first time such that the data is once encrypted” as recited in claim 1.

Accordingly, claim 1 is allowable over Markandey and allowance thereof is respectfully requested.

Claims 4 and 11, which depend directly and indirectly from claim 1, are also in condition for allowance because of their dependence on an allowable claim.

(b) On pages 11-12, the Action rejects claim 14. Claim 14 recites: “A method for securely receiving data comprising: receiving packetized, twice encrypted data; decrypting the packetized, twice encrypted data a first time such that the packetized data is once decrypted; reconstructing the non-packetized, once decrypted data; and decrypting the reconstructed, once decrypted data a second time.” (emphasis added).

For at least the following reasons, Markandey does not anticipate claim 14.

Markandey does not teach or suggest decrypting non-packetized data. Specifically, Markandey does not teach or suggest “reconstructing the non-packetized, once decrypted data; and decrypting the reconstructed, once decrypted data a second time,” as recited in claim 14. As discussed above, Markandey only discloses scrambling of packetized data. When the packetized data is received at the receiver, Markandey teaches descrambling the packets (see Markandey, FIG. 7, paragraph [0076]). Thus, Markandey does not teach or suggest decrypting non-packetized data. Therefore, Markandey does not teach or suggest “reconstructing the non-packetized, once decrypted data; and decrypting the reconstructed, once decrypted data a second time,” as recited in claim 14.

Accordingly, claim 14 is in condition for allowance and allowance thereof is respectfully requested.

Claims 17 and 19, which depend directly and indirectly from claim 14, are also in condition for allowance because of their dependence on an allowable claim.

II. On pages 12-13, the Action rejects claims 27 and 36 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,721,778 to Kubota (hereinafter Kubota). However, this reference to Kubota appears to be erroneous. The rejection applied in the Action appears to be based on Markandey as the figures referenced and described on pages 12-13 of the Action refer to Markandey, and do not correspond to Kubota. Applicant will assume the Action intended to refer to Markandey, and not Kubota.

(a) For reasons analogous to those given in the remarks on claim 1, Markandey does not anticipate claim 27. Accordingly, claim 27 is in condition for allowance and allowance thereof is respectfully requested.

(b) For reasons analogous to those given for claims 1, Markandey does not anticipate claim 36. Accordingly, claim 36 is in condition for allowance and allowance thereof is respectfully requested.

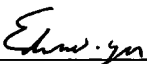
Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Response is respectfully requested.

Respectfully submitted,

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